

Date: 7/6/14 People in lab: Emily Puleo, Joshua Heath

Title: PCR of hmp

Start Time: 10 am

Purpose: Amplify PCR with the iGEM prefix and suffix

Protocol: LTM Ed. 2 PCR

Exceptions: 7.5 uL template DNA, 2.5 uL primers

Products:

Sample Label	Description	Source Label	Quantity
hmp PCR 7/6 A	hmp with prefix and suffix	---	1
hmp PCR 7/6 B	hmp with prefix and suffix	---	1

Results:

Notes:

Stop Time: 1:45 pm

Next: Gel electrophoresis to check products

Date: 7/6/14 People in lab: Emily Puleo, Joshua Heath

Title: Gel electrophoresis of hmp PCR 7/6 A and B

Start Time: 2:45 pm

Purpose: Check PCR product

Protocol: LTM Ed. 2 Gels

Exceptions:**Products:**

Well	1	2	3	4	5	6	7	8
-	-	7/6 hmp A	-	Ladder	-	7/6 hmp B	-	

Products:

Results:

Notes:

Stop Time: 3:30 pm

Next: TOPO

Date: 7/6/14 People in lab: Emily Puleo, Joshua Heath

Title: TOPO cloning of hmp products

Start Time: 1:55 pm

Purpose: To make more copies of the PCR product

Protocol: Invitrogen TOPO cloning kit manual

Exceptions:

Products:

Sample Label	Description	Source Label	Quantity
A1	---	hmp PCR 7/6 A	1
B1	---	hmp PCR 7/6 B	1

Results:

Notes:

Stop Time: 2:10 pm

Next: Transformation

Date: 7/6/14 People in lab: Emily Puleo, Joshua Heath

Title: Chemical Transformation of hmp

Start Time: 2:10 pm

Purpose: Blue/white screening

Protocol: LTM Ed 2 Chemical Transformation

Exceptions: Let xgal diffuse through agar for 1 hour

Products:

Sample Label	Description	Source Label	Quantity
7/6 CT A-1	20 uL	A1	1
7/6 CT A-2	200 uL	A1	1
7/6 CT B-1	20 uL	B1	1
7/6 CT B-2	200 uL	B1	1

Results:

Notes: Commercial competent cells used

Stop Time: 4:40 pm

Next: Blue/white screening

Date: 7/8/14 People in lab: Joshua Heath

Title: Making plates

Start Time: 12 pm

Purpose: To have new plates with potent antibiotics

Protocol: LTM Ed. 2

Exceptions:

Products:

Results:

Notes:

Stop Time: 2:45 pm

Next: Ladder - D1 - D2 - D3

Date: 7/8/14 People in lab: Joshua Heath

Title: Making Plates

Start Time: 3:35 pm

Purpose: To have new plates with potent antibiotics again

Protocol: LTM Ed. 2

Exceptions:

Products:

Results:

Notes: New ampicillin used

Stop Time: 6:45 pm

Next:

Date: 7/22/14 People in lab: Emily Puleo

Title: Testing Ampicillin Plates

Start Time: 8:30 pm

Purpose: To make sure the newly made plates work

Protocol: LTM Ed 2

Exceptions:

Products:

Sample Label	Description	Source Label	Quantity
7/22 EP	Streaked isolated colonies onto new plate	JH CT 4	1

Results: No lawn growth, plates are good

Notes:

Stop Time: 8:40 pm

Next:

Date: 7/24/14 People in lab: Emily Puleo

Title: PCR hmp

Start Time: 12:03 pm

Purpose: Add prefix and suffix **Protocol:** LTM Ed 2 PCR

Exceptions: 2.5 uL primers, 7.5 uL E coli Template

Products:

Sample Label	Description	Source Label	Quantity
7/24 A	hmp with prefix and suffix added	---	1

Results:

Notes:

Stop Time: 3:10 pm

Next: TOPO

Date: 7/24/14 People in lab: Emily Puleo, Caleb Treccazi

Title: TOPO cloning of hmp and transformations of hmp and norV

Start Time: 3:10 pm

Purpose: To get lots of copies of hmp and do blue white screening and to test ligated norV product

Protocol: LTM Ed 2 Transformations, Invitrogen TOPO cloning kit manual

Exceptions:

Products:

Sample Label	Description	Source Label	Quantity
7/24 CT hmp 1	20 uL hmp and 60 uL xgal	7/24 A	1
7/24 CT hmp 2	200 uL hmp and 60 uL xgal	7/24 A	1
7/24 CT norV 1	20 uL	L1 6/6	1
7/24 CT norV 2	200 uL	L1 6/6	1

Results: (7/25) No growth except on hmp 1 where there were lots of white colonies and one blue colony

Notes:

Stop Time: 5:45 pm

Next: blue white screening of hmp; inoculation of norV from any growth

Date: 7/25/14 People in lab: Emily Puleo

Title: Isolation of hmp white colonies

Start Time: 1:15 pm

Purpose: To have the correct gene

Protocol: LTM Ed. 2 Innoculations

Exceptions:

Products:

Sample Label	Description	Source Label	Quantity
7/25 I 1	white colony inoculation	7/24 CT hmp 1	1
7/25 I 2	white colony inoculation	7/24 CT hmp 1	1
7/25 I 3	white colony inoculation	7/24 CT hmp 1	1

Results:

Notes:

Stop Time: 1:45 pm

Next: miniprep

Date: 7/26/14 People in lab: Emily Puleo

Title: Miniprep and nanodrop

Start Time: 9:30 am

Purpose: Purification of plasmids that most probably have hmp and testing of quality of such

Protocol: LTM Ed. 2 Miniprep and nanodrop

Exceptions:

Products:

Sample Label	Description	Source Label	Quantity
7/26 MP 1	ng/uL = 30.6; 260/280 = 1.97; 260/230 = 2.33	7/25 I 1	1
7/26 MP 2	ng/uL = 29.9; 260/280 = 1.87; 260/230 = 2.4	7/25 I 2	1
7/26 MP 3	ng/uL = 34.4; 260/280 = 1.9; 260/230 = 2.35	7/25 I 3	1

Results:

Notes: Forgot to mix MP1 and MP2 so retested

Stop Time: 11:30 am

Next: digest with EcoRI to confirm presence of hmp

Date: 7/26/14 People in lab: Emily Puleo

Title: Digestion

Start Time: 11:40 am

Purpose: To check for the presence of hmp

Protocol: LTM Ed. 2 Digestion

Exceptions:

Products:

Sample Label	Description	Source Label	Quantity
7/26 D 1	hmp digested with EcoRI	7/26 MP 1	1
7/26 D 2	hmp digested with EcoRI	7/26 MP 2	1
7/26 D 3	hmp digested with EcoRI	7/26 MP 3	1

Results:

Notes:

Stop Time: 1:35 pm

Next: Run a gel to determine size

Date: 7/26/14 People in lab: Emily Puleo

Title: Gel Electrophoresis

Start Time: 1:45 pm

Purpose: To check product size from digestion

Protocol: LTM Ed. 2 Gels

Exceptions:

Products:

Well	1	2	3	4	5	6	7	8
-	-	-	D1	D2	Ladder	D3	-	

Products:

Results:

Notes:

Stop Time: 2:30 pm

Next:

Date: 7/27/14 People in lab: Joshua Heath

Title: Chemical Transformation

Start Time: 1 pm

Purpose: Get cells to take up DNA

Protocol: LTM Ed. 2 Chemical Transformations

Exceptions:

Products:

Sample Label	Description	Source Label	Quantity
7/27 CT1	20 uL	L1 6/6	1
7/27 CT2	200 uL	L1 6/6	1

Results:

Notes:

Stop Time: 4:40 pm

Next: Check plates for growth

Date: 7/30/14 People in lab: Joshua Heath

Title: Miniprep and Nanodrop

Start Time: 10:40 am

Purpose: Purify DNA and check quality

Protocol: LTM Ed. 2 Miniprep and Nanodrop

Exceptions:

Products:

Sample Label	Description	Source Label	Quantity
7/30 MP 1	Water	7/29 BC1	1
7/30 MP 2	Water	7/29 BC2	1
7/30 MP 3	Elution	7/29 BC3	1
7/30 MP 4	Elution	7/29 BC4	1

Results: MP 1 - ng/uL = 171.1, 260/280 = 1.92, 260/230 = 3.02; MP 2 ng/uL = 171.6, 260/280 = 1.9, 260/230 = 3.17; MP 3 ng/uL = 161.2, 260/280 = 1.92, 260/230 = 2.21; MP 4 ng/uL = 186.1, 260/280 = 1.9, 260/230 = 2.15

Notes:

Stop Time: 1:40 pm

Next: Digest with EcoRI

Date: 7/30/14 People in lab: Joshua Heath

Title: Digestion

Start Time: 2 pm

Purpose: To separate hmp

Protocol: LTM Ed. 2 Digestion

Exceptions:

Products:

Sample Label	Description	Source Label	Quantity
7/30 D1	hmp digested with EcoRI	7/30 MP1	1
7/30 D2	hmp digest with EcoRI	7/30 MP2	1
7/30 D3	hmp digested with EcoRI	7/30 MP3	1
7/30 D4	hmp digested with EcoRI	7/30 MP4	1

Results:

Notes:

Stop Time: 4:15 pm

Next: Gel

Date: 7/30/14 People in lab: Joshua Heath

Title: Gel Electrophoresis

Start Time: 5:50 pm

Purpose: To identify the hmp fragment

Protocol: LTM Ed. 2 Gels

Exceptions:

Products:

Well	1	2	3	4	5	6	7	8	9	10
-	Ladder	-	D1	-	D2	-	D3	-	D4	-

Products:

Results:

Notes:

Stop Time: 8:10 pm

Next: